

ABSTRACT

A method and system of sharing information between a host computer system and a peripheral computer system. A plurality of conduit programs running simultaneously on the host computer system synchronize information between the two computer systems. The conduits initiate multiple interleaved requests to transfer information across a single communication link between the two computer systems. Thus, the conduits initiate time multiplex transfers across the single communication link. In general, one or more conduits can perform a non-transfer task while another conduit can simultaneously perform a transfer over the host-peripheral communication link. In one embodiment, if more than one conduit initiates a request to transfer information at one time, arbitration is used to order access to the communication link. In another embodiment, the conduits synchronize records between corresponding databases on each computer system. In other embodiments, the conduits are used to load software onto the peripheral computer or to exchange e-mail between the two computer systems. While one active conduit is performing a task that does not involve use of the communication link, the other simultaneously executing conduit can be using the communication link to transfer records between the host and the palmtop.